

P16459

Serial No. 10/608,879

REMARKS

Claims 1-11 and 13-22 remain for reconsideration. Claim 12 has been cancelled without prejudice.

Claims 1-14 and 16-22 stand rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Published Application No. 2004/0179784 to Vancoille et al. (Vancoille).

Similarly, claims 15 stands rejected under 103(a) and being unpatentable over Vancoille.

These rejections are respectfully traversed based on the following discussion.

Briefly, embodiments of the invention provide a more reliable method of measuring fiber-coupled optical power output from a laser. As shown in Figure 3 of the present application, a prismatic tap assembly redirects a tapped portion of a laser beam 180° back to the substrate from which it came and allows the greater portion of the light to pass through in a straight line from its source. The assembly may be formed for example from a single piece of injection mounded plastic. Opposing angled sides near the top of the assembly are coated with either a substantially totally reflective coating to form a mirror 72 or a partially reflective coating to form a splitter 70.

As explained for example in paragraph [0014] of the application “injection molded plastic.... [is] coated to form mirrors for the sides 70 and 72” (emphasis added). As further explained in paragraph [0013] this coating may be a silvered coating to form the mirrors. Of course in this context, “silvered” refers to any coating that causes total or partial reflection of light and does not necessarily have to be the actual element silver.

In contrast, the published application to Vancoille does not teach or suggest any such coatings. Instead, Referring to Figure 1, Vancoille relies on the phenomena of Total Internal Reflectance (TIR) such as at interface 111, or “wedged air/polymer interfaces” (paragraph [0020]) such as at interface 113 in order to redirect or split light. Figure 5, also relied upon by the Examiner, uses TIR at interface 511 to redirect a beam. Unlike the mirror coatings used in the present invention, the effectiveness of both TIR as well as the “wedged air/polymer interfaces” may be a function of the interface angles, the respective indexes of refraction of the polymer material and the air gap as well as particular light wavelengths.

P16459

Serial No. 10/608,879

As amended, all claims in the present application recite first and second coatings over the angled portions to form either a partially or substantially totally reflective mirror. For example, claim 1 recites "a first coating to form a partially reflective mirror on the first angled surface over the input leg to allow a portion of a beam to pass straight through the input leg from a source; and a second coating to form a substantially totally reflective mirror on the second angled surface above the output leg" (emphasis added). Independent claims 11 and 17 contain similar recitations.

It is respectfully submitted that Vancoille does not teach or suggest the claimed mirrored coatings. The closest Vancoille appears to come is at page 3, paragraph [0024] wherein Vancoille indicates that interface 413 may include a "thin optical coating" however, it is clear from the text as well as Figure 4 that this coating is not a mirror coating, but rather used to attenuate a beam and produce a second monitoring beam. This is of course unrelated applicant's claimed invention.

Further, as recited in claim 1, the present invention recites "beam to pass straight through the input leg from a source". This feature takes advantage of the beam orientation of a vertical cavity surface emitting laser (VCSEL) which is perpendicular to the substrate. This likewise not taught or suggested by the cited prior art as Vollcoille redirects the main output beam by 90° to be parallel with the substrate.

MPEP § 2131 mandates that "TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT IN THE CLAIM". Furthermore, the MPEP, citing Richardson v. Suzuki Motor Co., 9 USPQ2d 1051, 1053 (Fed. Cir. 1987), states "[t]he identical invention must be shown in as complete detail as is contained in the... claim" (emphasis added).

Here, Vancoille does not teach or suggest the claimed coatings, nor do they teach or suggest allowing a beam to pass straight through from its source as claimed.

It is therefore respectfully submitted that the rejections to the claims are improper under Section 102 as Vancoille cannot anticipate the rejected claims since they do not "teach the identical invention". Further, since the highlighted features are not taught or suggested, Vancoille does not establish a case of *prima facie* obviousness under § 103(a). Based on the above discussion with reference to the MPEP guidelines, it is respectfully requested that the rejections based on 35 U.S.C. § 102 be withdrawn.

Nov-12-2004 12:51pm From-LF3 OFFICE AREA

7036333303

T-188 P.010/010 F-005

P16459

Serial No. 10/608,879

In view of the foregoing, it requested that the application be reconsidered, that claims 1-11 and 13-22 be allowed and that the application be passed to issue. Please charge any shortages and credit any overcharges to Intel's Deposit Account number 50-0221.

Respectfully submitted,


Kevin A. Reif
Reg. No. 36,381

INTEL
LF1-102
4050 Lafayette Center Drive
Chantilly, Virginia 20151
(703) 633-6834